PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION See Form PCT/IPEA/416				
International application No. Int	ternational filing date (day/month/year)	Priority date (day/month/year)			
PCT/SE2004/000896 09	9.06.2004	24.07.2003			
International Patent Classification (IPC) or na	tional classification and IPC				
B23P 15/26					
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Applicant					
SWEP International AB e	. .				
SWEF INCELHACIONAL AB e	. C al				
	inary examination report, established by mitted to the applicant according to Artic	this International Preliminary Examining le 36.			
2. This REPORT consists of a total of	3 sheets, including this co	ver sheet.			
3. This report is also accompanied by Al	NNEXES, comprising:				
a. (sent to the applicant and	d to the International Bureau) a total of	1 sheets as follows:			
<u> </u>					
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
b. (sent to the International	Bureau only) a total of (indicate type an	d number of electronic carrier(s)			
(Sem to the International	· · · · · · · · · · · · · · · · · · ·	ng and/or tables related thereto, in electronic			
form only, as indicated in Administrative Instructio	the Supplemental Box Relating to Sequ				
4. This report contains indications relation	ng to the following items:				
Box No. I Basis of the	e report				
Box No. II Priority					
Box No. III Non-establi	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack of uni	ity of invention				
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Box No. VI Certain documents cited					
Box No. VII Certain defects in the international application					
Box No. VIII Certain observations on the international application					
Date of submission of the demand	Date of completi	on of this report			
		•			
17.02.2005	18.10.200	18.10.2005			
Name and mailing address of the IPEA/SE		Authorized officer			
Patent- och registreringsverket Box 5055					
S-102 42 STOCKHOLM		Fredrik Andersson/MP			
Facsimile No. +46 8 667 72 88 Telephone No. +46 8 782 25 00 Form PCT/IPEA/409 (cover sheet) (April 2005)					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/000896

Box	No. I	Ва	asis of the report			
1.	With r	egard to	o the language, this report is based on:			
		the inte	ernational application in the language in which it was filed			
			lation of the international application into is the language of a translation furnished for the purposes of:			
			international search (Rules 12.3(a) and 23.1(b))			
			publication of the international application (Rule 12.4(a))			
			international preliminary examination (Rules 55.2(a) and/or 55.3(a))			
2.	furnish	ith regard to the elements of the international application, this report is based on (replacement sheets which have been raished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" d are not annexed to this report):				
		the inte	ernational application as originally filed/furnished			
	\boxtimes	the des	scription:			
			1-7			
		pages*				
	\square	pages*				
		the clai	0	on originally flad/formished		
	•	pages*	as amended (together with a	as originally filed/furnished ny statement) under Article 19		
		. •	9 received by this Authority on 27.	·		
		pages*				
	\boxtimes	the dra	awings:	.00		
		pages		as originally filed/furnished		
		pages*	received by this Authority on			
		pages*				
		a seque	ence listing and/or any related table(s) – see Supplemental Box Relating to Sequenc	e Listing.		
3.		The am	nendments have resulted in the cancellation of:	:		
			the description, pages	_		
	٠		the claims, Nos.			
			the drawings, sheets/figs:			
			the sequence listing (specify):			
			any table(s) related to the sequence listing (specify):			
4.		This remade, s	eport has been established as if (some of) the amendments annexed to this report since they have been considered to go beyond the disclosure as filed, as indicated)).	and listed below had not been in the Supplemental Box (Rule		
			the description, pages			
			the claims, Nos.			
			the drawings, sheets/figs			
			the sequence listing (specify):			
			any table(s) related to the sequence listing (specify):			
*	* If item 4 applies, some or all of those sheets may be marked "superseded."					
E	Form PCT/IPE A/409 (Box No. D. (April 2005)					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/000896

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims Claims	1-5	YES NO
Inventive step (IS)	Claims Claims	1-5	YES NO
Industrial applicability (IA)	Claims . Claims	1-5	YES NO

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

D1: GB 2129538 A
D2: US 4099928 A
D3: GB 2048130 A
D4: US 5908070 A

D5: US 2003/0121649 A1

New claims have been filed on 27 April 2005 where old claim 6 has been cancelled.

Claims 1-5

The invention defined in claims 1-5 is not disclosed by any of the cited documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed method of manufacturing a plate heat exchanger according to claims 1-5. Therefore, the invention claimed in claims 1-5 is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-5 is novel and is considered to involve an inventive step.

The invention is industrially applicable.

The Swedish Patent Office PCT International Application

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9

5. A method according to claim 1, c h a r a c t e r i s e d in that the two holes in a pair of walls forming a port hole in a heat exchanger plate are of elliptic shape and angularly displaced (Figs. 16-20).